

**ELEVATION**

**GENERAL NOTES**

Layout of riprap may be varied in the field to suit ground conditions as directed by the Engineer.

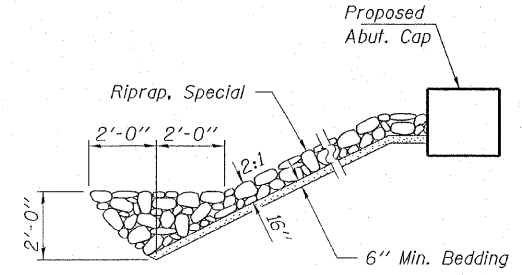
The Contractor shall drive one steel test pile in a permanent location at the North Abutment, as directed by the Engineer before ordering the remainder of the piles.

Excavation required to construct the Abutments shall be included in Concrete Structures. No additional compensation will be allowed for Structure Excavation.

All proposed construction activities shall be in accordance with Nationwide Permit number 14 of the Department of the Army authorized under Section 404 of the Clean Water Act. The IEPA has issued Section 401 Water Quality Certification for this activity. See Special Provisions for conditions. See sheet 14 for Borings.

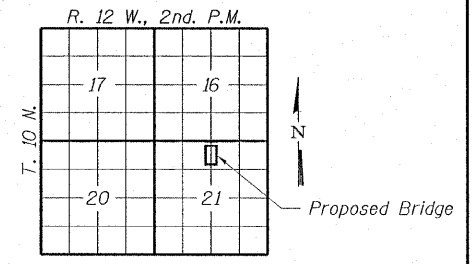
HURRICANE CREEK  
BUILT 200\_ BY  
CLARK COUNTY  
SEC. 05-00261-00-BR  
F.A. PROJ. RS-690(108)  
STR. NO. 012-3333  
LOADING HS 20

**NAME PLATE**  
See Std. 515001

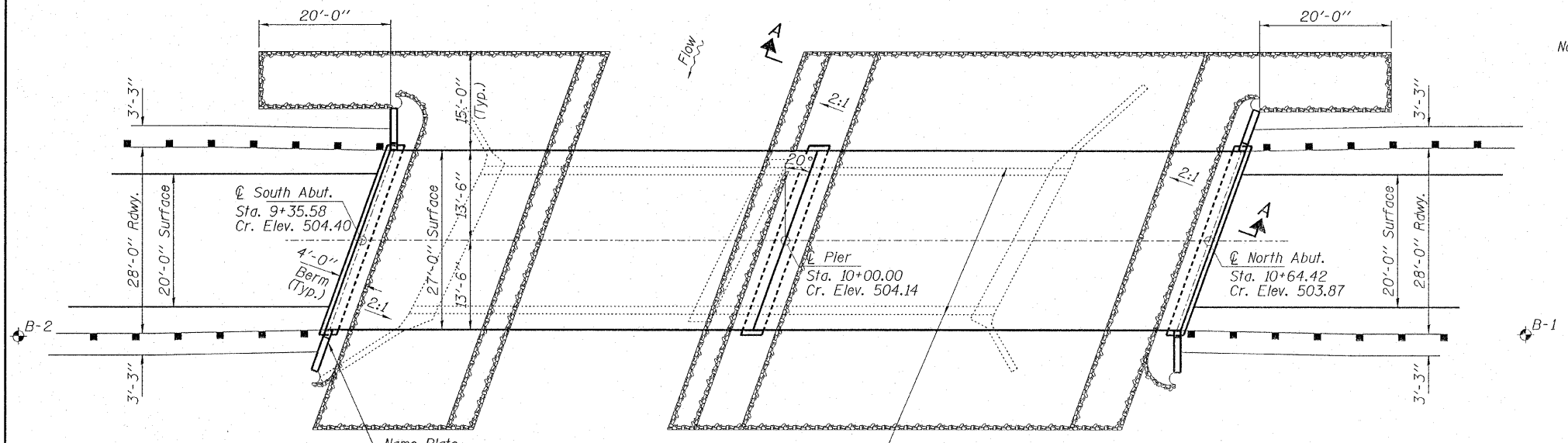


**SECTION A-A**

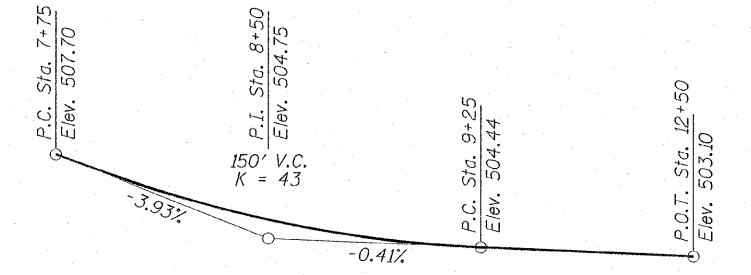
Note: See Special Provisions for Riprap, Special.



**LOCATION SKETCH**



**PLAN**



**PROFILE GRADE**

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Riprap, Special	Ton			570
Concrete Structures	Cu. Yd.		27.2	27.2
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	3,510		3,510
Reinforcement Bars	Pound		4,200	4,200
Steel Railing, Type S1	Foot	266		266
Furnishing Steel Piles HP10x42	Foot		240	240
Driving Steel Piles	Foot		140	140
Test Pile Steel HP10x42	Each		1	1
Concrete Encasement	Cu. Yd.		5.2	5.2
Name Plates	Each		1	1
Setting Piles in Rock	Each		5	5

**DESIGN STRESSES**

**FIELD UNITS**  
 $f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinf.)

**PRECAST PRESTRESSED UNITS**

$f'_c = 5,000$  psi  
 $f'_{ci} = 4,000$  psi  
 $f'_s = 270,000$  psi ( $\frac{1}{2}$ "  $\phi$  low lax. strands)  
 $f'_{sl} = 201,960$  psi ( $\frac{1}{2}$ "  $\phi$  low lax. strands)  
 $f_y = 60,000$  psi (Reinf.)

Loading HS 20-44  
 Design Specifications: 2002 AASHTO & all applicable interims.  
 25#/Sq. Ft. included in dead load for future wearing surface.

**SEISMIC DATA**

Seismic Performance Category (SPC) = A  
 Bedrock Acceleration Coefficient (A) = 0.07g  
 Site Coefficient (S) = 1.5

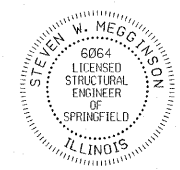
**WATERWAY INFORMATION**

Flood		Freq. Yr.	Q C.F.S.	Opening Exist. Sq. Ft.	Prop. Sq. Ft.	Natural H.W.E.	Head - Ft. Exist.	Prop. Head - Ft.	Headwater El. Exist.	Prop. Headwater El.
Design		20	1,747	370	520	500.0	0.4	0.7	500.4	500.7
Base		100	2,860	410	660	501.9	2.0	1.5	503.9	503.4
Overtopping										
Max. Calc.		500	3,783	410	660	503.4	1.5	0.5	504.9	503.9

Drainage Area = 16.7 Sq. Mi. Low Grade Elev. 502.3 @ Sta. 15+00

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO Standard Specifications for Highway Bridges".

*Steven W. Megginson* 5-10-06  
 ILLINOIS STRUCTURAL NO. 6064



Expires 11-30-06

**HAMPTON, LENZINI & RENWICK, INC.**  
 CIVIL & STRUCTURAL ENGINEERS

**HLR** 3085 STEVENSON DRIVE, SUITE 201  
 SPRINGFIELD, ILLINOIS 62703  
 (217) 546-3400

ELGIN • SPRINGFIELD • DUQUOIN

PROJECT NUMBER: 12-23-0025-1 DATE: 05/10/06  
 DESIGNED: J.W.F. CHECKED: S.W.M. DRAWN: D.T.M.

**GENERAL PLAN AND ELEVATION**  
 SECTION 05-00261-00-BR  
 F.A.S. 690 / C.H. 22 / FOX ROAD  
 CLARK COUNTY  
 STRUCTURE NO. 012-3333 / STATION 10+00